

CLAIMS

What is claimed is:

1. A method for identifying a software configuration in an image delivery
5 system having a storage device, the method comprising:
processing a component list associated with a system to be built, the component list
containing a essential portion and a non-essential portion,
performing a key generating function on the essential portion of the component list to
generate a key associated with the software configuration, and
10 using the generated key to determine if the software configuration exists on the
storage device.

2. The method of claim 1, further comprising the steps of:
transferring an image associated with the software configuration to one or more target
15 devices if the essential component list associated with each of the one or more
target devices produces the generated key when the key generating function is
performed on the associated each essential component list, and
generating a new image associated with the software configuration if the essential
component list associated with each of the one or more target devices fails to
20 produce the generated key when the key generating function is performed on
the associated each essential component list.

3. The method of claim 1, wherein the key generating function includes a
128-bit hash algorithm.
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4. The method of claim 2, wherein the key generating function includes a
128-bit hash algorithm.

5. The method of claim 1, wherein the essential component list includes

software-related components.

6. The method of claim 2, wherein the essential component list includes software-related components.

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7. A method for identifying a software configuration in an image delivery system having a storage device, the method comprising:

generating a bill of materials associated with a target computer system from an order entry portion of the image delivery system,

10 dividing the bill of materials into an essential portion and a non-essential portion,
sorting at least the essential portion of the bill of materials into alphanumeric order,
performing a key generating function on the at least the essential portion of the bill of materials to generate a key associated with the software configuration, and
using the generated key to determine if the software configuration exists on the
15 storage device.

8. The method of claim 7, further comprising the steps of:
transferring an image associated with the software configuration to one or more of the target computer system if the at least the essential portion of the bill of materials associated with each of the one or more of the target computer
20 system produces the generated key when the key generating function is performed on the associated each at least essential portion of the bill of materials, and

generating a new image associated with the software configuration if the at least the
25 essential portion of the bill of materials associated with the each of the one or more target computer system fails to produce the generated key when the key generating function is performed on the associated each at least essential portion of the bill of materials.

9. The method of claim 7, wherein the key generating function includes a 128-bit hash algorithm.

10. The method of claim 8, wherein the key generating function includes a 128-bit hash algorithm.

11. The method of claim 7; wherein the essential portion of the bill of materials includes software-related components.

12. The method of claim 8, wherein the essential portion of the bill of materials includes software-related components.

13. The method of claim 7, wherein the at least essential portion of the bill of materials is sorted into ascending alphanumeric sequence.

14. The method of claim 8, wherein the at least essential portion of the bill of materials is sorted into ascending alphanumeric sequence.

15. A method for identifying a software configuration in an image delivery system having a storage device, the method comprising:
generating a bill of materials associated with a target computer system from an order entry portion of the image delivery system,
sorting the bill of materials into alphanumeric order,
performing a key generating function on at least a portion of the bill of materials to generate a key associated with the software configuration, and
using the generated key to determine if the software configuration exists on the storage device.

16. The method of claim 15, further comprising the steps of:

transferring an image associated with the software configuration to one or more of the target computer system if the at least a portion of the bill of materials associated with each of the one or more of the target computer systems produces the generated key when the key generating function is performed on the associated each at least a portion of the bill of materials, and
5 generating a new image associated with the software configuration if the at least a portion of the bill of materials associated with the each of the one or more target computer system fails to produce the generated key when the key generating function is performed on the associated each at least a portion of
10 the bill of materials.

17. The method of claim 15, wherein the key generating function includes a 128-bit hash algorithm.

15 18. The method of claim 16, wherein the key generating function includes a 128-bit hash algorithm.

19. The method of claim 15, wherein the essential component list includes software-related components.
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20. The method of claim 16, wherein the essential component list includes software-related components.

21. The method of claim 15, wherein the bill of materials is sorted into ascending alphanumeric sequence.
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22. The method of claim 16, wherein the bill of materials is sorted into ascending alphanumeric sequence.

23. A computerized system for identifying a software configuration for image delivery, the system comprising:

a processor,

5 a computer readable medium capable of being read by the processor, and
a plurality of computer instructions on the computer readable medium, the plurality of computer instructions executable by the processor, the plurality of computer instructions for causing the processor to:

10 generate a bill of materials associated with a target computer system from an
order entry portion of the image delivery system,
sort the bill of materials into alphanumeric order,
perform a key generating function on at least a portion of the bill of materials
to generate a key associated with the software configuration, and
using the generated key to determine if the software configuration exists on
15 the storage device.

24. The computerized system of claim 23, wherein the instructions further cause the processor to:

20 transfer an image associated with the software configuration to one or more of
the target computer system if the at least a portion of the bill of materials
associated with each of the one or more of the target computer systems
produces the generated key when the key generating function is performed
on the associated each at least a portion of the bill of materials, and
generate a new image associated with the software configuration if the at least
25 a portion of the bill of materials associated with the each of the one or
more target computer system fails to produce the generated key when the
key generating function is performed on the associated each at least a
portion of the bill of materials.

25. The computerized system of claim 23, wherein the key generating function includes a 128-bit hash algorithm.

26. The computerized system of claim 24, wherein the key generating
5 function includes a 128-bit hash algorithm.

27. The computerized system of claim 23, wherein the essential component list includes software-related components.

10 28. The computerized system of claim 24, wherein the essential component list includes software-related components.

29. The computerized system of claim 23, wherein the bill of materials is sorted into ascending alphanumeric sequence.
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30. The computerized system of claim 24, wherein the bill of materials is sorted into ascending alphanumeric sequence.

31. A computerized system for identifying a software configuration for
20 image delivery, the computerized system comprising:

a processor,
a computer readable medium capable of being read by the processor, and
a plurality of computer instructions on the computer readable medium, the plurality of computer instructions executable by the processor, the plurality of
25 computer instructions for causing the processor to:
generate a bill of materials associated with a target computer system from an order entry portion of the image delivery system,
divide the bill of materials into an essential portion and a non-essential portion,

sort at least the essential portion of the bill of materials into alphanumeric order,

perform a key generating function on the at least the essential portion of the bill of materials to generate a key associated with the software configuration, and

use the generated key to determine if the software configuration exists on the storage device.

32. The computerized system of claim 31, wherein the instructions further cause the processor to:

transfer an image associated with the software configuration to one or more of the target computer system if the at least the essential portion of the bill of materials associated with each of the one or more of the target computer system produces the generated key when the key generating function is performed on the associated each at least essential portion of the bill of materials, and

generate a new image associated with the software configuration if the at least the essential portion of the bill of materials associated with the each of the one or more target computer system fails to produce the generated key when the key generating function is performed on the associated each at least essential portion of the bill of materials.

33. The computerized system of claim 31, wherein the key generating function includes a 128-bit hash algorithm.

34. The computerized system of claim 32, wherein the key generating function includes a 128-bit hash algorithm.

35. The computerized system of claim 31, wherein the essential

component list includes software-related components.

36. The computerized system of claim 32, wherein the essential component list includes software-related components.

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37. The computerized system of claim 31, wherein the at least essential portion of the bill of materials is sorted into ascending alphanumeric sequence.

38. The computerized system of claim 32, wherein the at least essential
10 portion of the bill of materials is sorted into ascending alphanumeric sequence.

39. A computerized system for identifying a software configuration for image delivery, the computerized system comprising:

a processor,
15 a computer readable medium capable of being read by the processor, and
a plurality of computer instructions on the computer readable medium, the plurality of computer instructions executable by the processor, the plurality of computer instructions for causing the processor to:

process a component list associated with a system to be built, the component
20 list containing a essential portion and a non-essential portion,
perform a key generating function on the essential portion of the component list to generate a key associated with the software configuration, and
use the generated key to determine if the software configuration exists on the storage device.

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40. The computerized system of claim 39, wherein the instructions further cause the processor to:

transfer an image associated with the software configuration to one or more target devices if the essential component list associated with each of the

one or more target devices produces the generated key when the key generating function is performed on the associated each essential component list, and

5 generate a new image associated with the software configuration if the essential component list associated with each of the one or more target devices fails to produce the generated key when the key generating function is performed on the associated each essential component list.

10 41. The computerized system of claim 39, wherein the key generating function includes a 128-bit hash algorithm.

42. The computerized system of claim 40, wherein the key generating function includes a 128-bit hash algorithm.

15 43. The computerized system of claim 39, wherein the essential component list includes software-related components.

44. The computerized system of claim 40, wherein the essential component list includes software-related components.

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